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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/605,473 | 10/01/2003 | Allan McLane | 718395.52 | 2472 |
| 27128 | 7590 | 12/17/2004 | EXAMINER | |
| BLACKWELL SANDERS PEPER MARTIN LLP | | | FOX, JOHN C | |
| 720 OLIVE STREET | | | ART UNIT | |
| SUITE 2400 | | | PAPER NUMBER | |
| ST. LOUIS, MO 63101 | | | 3753 | |

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,473

Applicant(s)

MCLANE ET AL.

Examiner

John Fox

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 28-57 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

This action is responsive to the communication filed October 1, 2003.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-7, 10-12, 40, 43-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Gire et al.

Gire et al show a valve where the rotor is read as including a plurality of passages in that the common port at 1 is connected with a plurality of ports leading to 3a-d, 4a-d. The recitations of inlet and outlet in these claims merely relate to intended use and are given no weight.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5, 22-23, 25, 41-42, 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gire et al in view of Flider.

Gire et al show the claimed device except for a bias. Flider shows a spring for biasing a valve rotor to one position. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used a spring in the valve of Gire et al to bias the rotor to a desired position.

Claims 1 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ehrhardt.

Ehrhardt shows a rotary multiway valve which uses a stepper motor 24 to actuate, see column 2, line 55. The recitations of inlet and outlet in these claims merely relate to intended use and are given no weight.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrhardt in view of Babin.

Ehrhardt shows the claimed valve except for reduction gearing, which Babin shows. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used a reduction gearing as taught by Babin to increase the torque applied to the valve.

Claims 1, 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Muckler.

Muckler shows a rotary multiway valve with a T shaped passage. The recitations of inlet and outlet in these claims merely relate to intended use and are given no weight.

Claims 1 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Snyder.

Snyder shows a rotary multiway valve where outer portion 70 is read as the larger axial passage. The recitations of inlet and outlet in these claims merely relate to intended use and are given no weight.

Claims 1 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Burdick.

Burdick shows a rotary multiway valve with a pie shaped sector at 49. The recitations of inlet and outlet in these claims merely relate to intended use and are given no weight.

Claims 1, 19-20, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ford et al.

Ford et al shows a rotary multiway valve where the rotor is spaced from the housing and the valve includes flexible seals. The recitations of inlet and outlet in these claims merely relate to intended use and are given no weight.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al in view of Koch et al.

Ford et al show the claimed valve except the seals are carried by the rotor. Koch et al shows a rotary multiway valve where the seals are carried by the housing. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have reversed the seals of Ford et al and carry the seals on the housing.

Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al in view of Flider. Ford et al show the claimed valve except for a biasing means. Flider shows a spring for biasing a valve rotor to one position. It would have

been obvious for one of ordinary skill in the art at the time the invention was made to have used a spring in the valve of Ford et al to bias the rotor to a desired position.

Claims 25-26, 36-39 and 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al in view of Spies et al and further in view of Flider.

Aoki et al show a rotary multiway valve for a cooling circuit with valve 262, which appears to have two axial passages leading to and from the tank 4 and 4 radial passages, see Figures 3 and 16 in particular. Spies et al show a rotary multiway valve in the same environment which is biased, and Flider shows a rotary valve with a spring biasing the rotor. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have provided the Aoki et al valve with a spring bias in view of Spies et al and Flider.

Claims 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann in view of Inoue et al.

Lehman shows a rotary multiway valve as claimed except for the sensors. Inoue et al show a heater control valve with temperature and other sensors for controlling the valve through a processor. It would have been obvious for one of ordinary skill in the art at the time the invention was made to use such sensors in the system of Lehmann to similarly control the valve.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann in view of Inoue et al as applied above and further in view of Spies et al and Flider.

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Spies et al show a rotary multiway valve in the same environment as Lehmann which is biased, and Flider shows a rotary valve with a spring biasing the rotor. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have provided the Lehmann valve, as modified, with a spring bias in view of Spies et al and Flider.

Claims 40 and 47-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Winqvist et al.

Winqvist et al show a rotary multiway valve with fluid flow between the rotor as at 28 and the housing.

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winqvist in view of Flider.

Winqvist et al show the claimed valve except for biasing. Flider shows a rotary valve with a spring biasing the rotor. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have provided the Winqvist valve with a spring bias in view of Flider to similarly provide a default position.


Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fox whose telephone number is 571-272-4912.

The examiner can normally be reached on Increased Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 571-272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Fox
Primary Examiner
Art Unit 3753